

REMARKS

This is a Response to a non-final, second Office Action mailed May 16, 2005, in which a three (3) month Shortened Statutory Period for Response has been set, due to expire August 16, 2005. Claim 19 has been amended. No claims have been canceled. Claims 25-27 have been added. No new subject matter has been added to the application. No fee for additional claims is due by way of this Amendment. The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090. Claims 1-4, 6, 16, 18-27 are pending.

Allowable Subject Matter

Claim 22 was objected to as being dependent on a rejected base claim. The Examiner notes that claim 22 would be allowable if rewritten in independent form, to include all limitations of the base claim and any intervening claims. Applicants have elected to keep claim 22 in dependent form.

35 U.S.C. §102(b) Rejections of Claims 1-4, 6, 16, and 18 In View of Demler

The Examiner rejected claims 1-4, 6, 16, and 18 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,674,292 issued to Demler, Sr. (Demler). Applicants respectfully traverse these rejections.

Demler discloses a tubular connection device for connecting the ends of tubular members 6 together (Abstract). The connection device comprises two separate connection members, CM (hollow body member 1) and CMa (ferrule member 2). Column 2, lines 59-60. The hollow body member 1 includes projections 8 located at the ends of and on the exterior surface of the body member 1. Column 3, lines 14-16. In addition, the exterior surface the body member 1 between the flange 3 and the projection 8 is slightly tapered to facilitate movement of the ferrule member 2 onto the body member 1. Column 2, lines 74-75 and column 3, lines 1-2.

During assembly, the ferrule member 2 is placed over the tubular member 6. Column 3, lines 21-22. The tubular member 6 is disposed within the body member 1 until an

end of the tubular member 6 abuts an annular shoulder 4 located in the body member 1. Column 3, lines 22-25; Figures 1, 7, and 8. The ferrule member 2 is then forced onto the tapered portion of the body member 1 with jaw members 10. Column 3, lines 25-27. The ferrule member 2 causes the tapered sections of the body member 1 to be decreased in diameter (*e.g.*, compressed) and further causes the tapered sections to snugly and sealingly engage the ends of the tubular member 6. Column 3, lines 42-45.

Applicants' independent claim 1 recites, *inter alia*, "a ring portion having an outer circumference and an inner circumference, *the outer circumference being closely receivable by the opening in the work piece*; at least a first coupling member having at least a minimum inner circumference, an outer envelope, and an end section, *the coupling member extending axially from the ring portion*, the minimum inner circumference being larger than the inner circumference of the ring portion, *the outer envelope sized to be moved through the opening in the work piece*, and the end section configured to be engageable with another device; and *the ring portion being radially expandable where the amount of expansion is sufficient to establish a secure interference fit between the outer circumference of the ring portion and the opening in the work piece*" (emphasis added). Applicants respectfully submit that Demler does not disclose or suggest the features of claim 1.

The purpose of Demler is to connect the ends of tubular members, not to install a tubular fitting in a work piece, unless one of the tubes is considered to be a workpiece. Demler teaches that at least two separate connection members are required to engage a tubular member, those members being a body member 1 and a ferrule member 2. A ferrule¹ is a bushing for securing a pipe joint.

The Examiner appears to have taken the position that Applicants' ring portion is analogous to Demler's annular shoulder 4, which is located on the interior surface of the body member 1 and that Applicants' first coupling member is analogous to Demler's projection extending from the annular shoulder 4 and located under ferrule member 2, 2', as best seen in

a. _____

¹ Riverside Webster's II New College Dictionary, p. 415 (Houghton Mifflin Co. 1995)

Figures 1 and 7. Referring to Figure 1, the annular shoulder 4 includes an outer circumference that corresponds with that of the annular projection 3 of the connection member CM. The Examiner does not expressly identify the "workpiece" in Demler. However, because there are only two remaining components in Figure 1 of Demler, it follows that either the tube 6 or the ferrule 2 would have to operate as the "workpiece."

Based on the foregoing, Demler does not disclose, teach, or suggest that "the outer circumference [of the ring portion is] closely receivable by the opening in the work piece." Alternatively stated the outer circumference of Demler's annular shoulder 4 and/or the outer circumference of Demler's annular projection 3 is *not* closely received by *any other component*. In contrast, the outer circumference of Demler's annular shoulder 4 and/or annular projection 3 forms the outermost circumference of the assembled connection device. Hence, regardless of which component in Demler is defined as the workpiece, Demler still does not disclose, teach, or suggest the aforementioned feature of Applicants' claim 1.

Demler teaches that the ferrule members 2, 2' are moved into place on the body member 1 with a tool 10, and that the tapered sections of the body member 1 are thereby compressed. Thus, Demler teaches that the connection device is assembled under compression. Demler does not teach or suggest radial expansion. Consequently, claim 1 is novel over Demler. In addition, claims 2-4 and 6, which depend from claim 1, are allowable because they depend from an allowable base claim.

Applicants' independent claim 16 is also novel over Demler because claim 16 includes either the same or at least similar features as claim 1. Claim 18, which depends from claim 16, is allowable because it depends from an allowable base claim.

35 U.S.C. §102(b) Rejections of Claims 19-21 and 23-24 In View of Robertson

The Examiner rejected claims 19-21 and 23-24 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,092,358 issued to Robertson. Applicants respectfully traverse these rejections.

Robertson discloses a tubular joint for fixing metal tubes, connecting tubular elements together, or fixing tubes in plates. Column 1, lines 1-3. Robertson discloses an end of

Figure 1. A mandrel (e) is used to expand the sleeve (a) into the tube (b). Column 1, lines 20-55; Figure 1. Annular projections (f) formed on the sleeve (a) engage the tube (b) when the sleeve (a) is radially expanded by the mandrel (e). Column 1, lines 20-55; Figure 1. Robertson discloses alternate embodiments in the remaining figures, but these embodiments only deviate slightly from that of Figure 1.

Applicants' independent claim 19 recites, *inter alia*, "a fitting having a ring portion and at least one coupling section, the ring portion having an outer circumference and an inner circumference, the outer circumference being closely receivable by the opening in the work piece, the ring portion being radially expandable where the amount of expansion is sufficient to establish a secure interference fit between the outer circumference of the ring portion and the opening in the work piece, the at least one coupling section having at least a minimum inner circumference, an outer envelope, and a first portion, the coupling section extending axially from the ring portion, the minimum inner circumference being larger than the inner circumference of the ring portion, the outer envelope sized to be moved through the opening in the work piece" (emphasis added). Applicants respectfully submit that Robertson does not disclose, teach, or suggest at least some, if not all, of the features of claim 19.

The Examiner appears to take the position that Robertson's sleeve (a) is analogous to Applicants' ring portion, Robertson's annular projections (f) on the sleeve (a) are analogous to Applicants' coupling section, and the Robertson's workpiece (d) is analogous to Applicants' workpiece. Robertson teaches that the annular projections (f) *extend radially outward* from the sleeve (a). Therefore it follows that Robertson does not disclose, teach, or suggest "the coupling section *extending axially from* the ring portion" (emphasis added), as recited in claim 19.

In addition, Robertson does not disclose or teach that the "outer circumference [of the ring portion]" is "closely receivable by the opening in the work piece." In contrast, Robertson teaches that the annular projections (f) of the sleeve (a) are closely received by and engage the tube (b), not the workpiece (d). Likewise, Robertson does not teach "a secure interference fit between the outer circumference of the ring portion and the opening in the work piece." Again, Robertson teaches that the annular projections (f) of the sleeve (a) are radially expanded into the tube (b) and the applied radial expansion forces force the tube (b) radially

piece.” Again, Robertson teaches that the annular projections (f) of the sleeve (a) are radially expanded into the tube (b) and the applied radial expansion forces force the tube (b) radially against the workpiece (d). Column 1, lines 39-50. Consequently, Applicants submit that claim 19 is novel over Robertson.

Applicants’ independent claim 20 recites, *inter alia*, “inserting a first portion of a fitting into the opening in the work piece, the first portion of the fitting having an outer envelope sufficiently sized to be received by the opening, the fitting further having a ring portion positioned in the opening of the work piece, the ring portion connected with the first portion *where the first portion extends axially from the ring portion, the ring portion having an outer circumference sized to fit tightly within the opening of the work piece*; inserting a mandrel through the fitting located in the work piece, the ring portion of the fitting having an inner circumference sized to be radially expandable by an increased circumference section of the mandrel, the first portion of the fitting having an inner circumference sized to be slightly larger than the increased circumference section of the mandrel; and expanding the ring portion of the fitting in an outwardly radial direction as the mandrel is forced through the inner circumference of the ring portion” (emphasis added). For the reasons discussed above, the features of claim 20 are not disclosed, taught, or suggested by Robertson based on the above discussion with respect to claim 19. Accordingly, claim 20 is also novel over Robertson. In addition, claims 21-24, which depend from claim 20, are allowable because they depend from an allowable base claim.

35 U.S.C. §102(b) Rejections of Claims 20-22 In View of Tsuda

The Examiner rejected claims 20-22 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,997,193 issued to Tsuda et al. (Tsuda). Applicants respectfully traverse these rejections.

Tsuda generally discloses a method of connecting one pipe section to another pipe section (Abstract). In brief, Tsuda discloses a connector 10 that includes a top section A, an intermediate section B, and a rear section C (Figure 2a). The top section A has a primary ejection ring section 14 formed thereon. Column 5, lines 19-20; and Figure 1. The primary ejection ring section 14, to include the external peripheral section 14a formed thereon, is

expanded by a build-up device 16 into a tube 15a, which may be encased with insulation pipe 15. Column 6, lines 3-19; and Figures 3a and 11.

Applicants' independent claim 20 recites, *inter alia*, "the ring portion connected with the first portion where the first portion extends axially from the ring portion." Applicants respectfully submit that Tsuda does not teach that "the first portion extends axially from the ring portion." In contrast, Tsuda teaches that the primary ejection ring section 14 extends radially from the top section A and that a secondary ejection ring section 13 extends radially from the intermediate section B. Column 5, lines 19-26. Accordingly, Applicants submit that claim 20 is novel over Tsuda. In addition, claims 21-22, which depend from claim 20, are allowable because they depend from an allowable base claim.

Conclusion

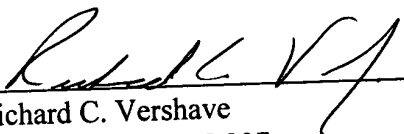
Overall, the cited references do not singly, or in any motivated combination, teach or suggest the claimed features of the embodiments recited in independent claims 1, 16, 19, and 20, and thus such claims are allowable. Because the remaining claims depend from allowable independent claims, and also because they include additional limitations, such claims are likewise allowable. If the undersigned attorney has overlooked a relevant teaching in any of the references, the Examiner is requested to point out specifically where such teaching may be found.

Applicants submit that all remarks herein that reference structural analogies between Applicants' apparatus and those in the cited references are provided for brevity and clarity and do not constitute admissions that such features are actually analogous and/or even structurally similar.

Application No. 10/633,294
Reply to Office Action dated May 16, 2005

In light of the above amendments and remarks, Applicants respectfully submit that all pending claims are allowable. Applicants, therefore, respectfully request that the Examiner reconsider this application and timely allow all pending claims. Examiner Bochna is encouraged to contact Mr. Vershave by telephone to discuss the above and any other distinctions between the claims and the applied references, if desired. If the Examiner notes any informalities in the claims, he is encouraged to contact Mr. Vershave by telephone to expediently correct such informalities.

Respectfully submitted,
Seed Intellectual Property Law Group PLLC


Richard C. Vershave
Registration No. 55,907

RCV:jr

Enclosure:
Postcard

701 Fifth Avenue, Suite 6300
Seattle, Washington 98104-7092
(206) 622-4900
Fax: (206) 682-6031

320043.429 / 595104v1